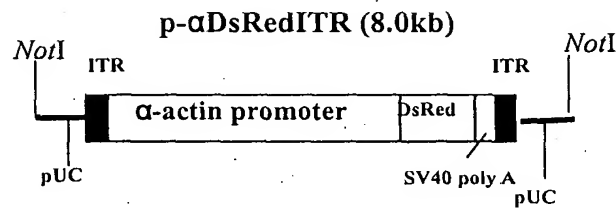
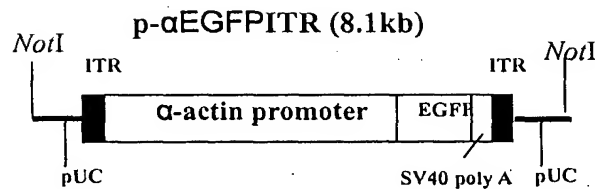


### WHAT IS CLAIMED IS:

1. A gene fragment comprising (1)  $\alpha$ -actin gene promoter of golden zebrafish; (2) fluorescence gene; (3) inverted terminal repeats (ITR) of adeno-associated virus; and (4) a basic part from pUC.
2. The fragment of Claim 1 which is



OR

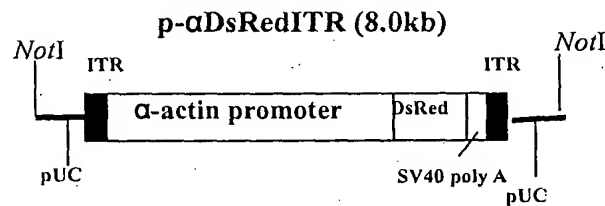


3. A method of producing golden zebrafish with systemic fluorescence comprising:
  - (a) constructing a plasmid including ITR, CMV promotor, fluorescent gene, S40 poly A and ITR from upstream to downstream;
  - (b) replacing the CMV promotor with  $\alpha$ -actin gene promotor (systemic

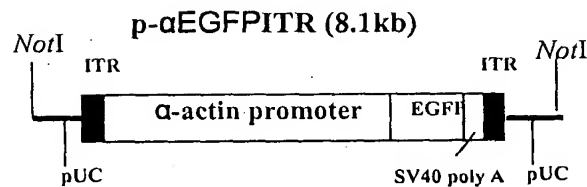
skeletal muscle actin gene expression) of golden zebrafish to produce a new plasmid construct;

- (c) linearizing the new plasmid construct;
- (d) microinjecting the linearized plasmid construct into fertilized eggs of golden zebrafish;
- (e) selecting the eggs with fluorescence; and
- (f) cultivating the eggs to produce golden zebrafish with systemic fluorescence.

4. The method of Claim 3 wherein the linearized plasmid is



or



5. The method of Claim 3 wherein the fluorescent gene is red fluorescent gene from pDsRed2-1.
6. The method of Claim 3 wherein the fluorescent gene is green fluorescent gene from pEGFP-1.
7. A golden zebrafish with systemic fluorescence produced from the method of Claim 3.
8. The golden zebrafish of Claim 7 which has systemic red fluorescence.
9. The golden zebrafish of Claim 7 which has systemic green fluorescence.